CLAIMS:

- 1. An apparatus for producing hydrophobic silica fine powder, comprising:
- a means for pyrolyzing a silane compound to form silica

 5 fine powder,
 - a means for agglomerating the silica fine powder,
 - a first cyclone and a first filter for collecting the agglomerated silica fine powder,
- a fluidization vessel having a hydrophobizing section for 10 hydrophobizing the collected silica fine power, and
 - a second cyclone and a second filter for collecting hydrophobic silica fine powder which flies out of the fluidization vessel, which second cyclone and second filter can each be held at a temperature of 100 to 500°C.

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